

STENNIS SPACE CENTER PM PROGRAM EVOLUTION

Presented by: Veronica Ciaruffoli
Facilities Systems Department Manager

WHAT DO WE PM

- 142 buildings with over 10,000 pieces of tagged equipment
- Approximately 2,000,000 SF of floor space
- 7 1/2 miles of man-made canals
- Approximately 25 miles each of HV, natural gas, and potable water lines
- 45 miles of maintained roadways

WHERE WE FOUND OURSELVES ON 8/29/99

- Inaccurate, incomplete equipment database
- Equipment, crew, job plan mismatches
- Inaccurate, incomplete maintenance history database
- Nonexistent man-hour/job plan estimates
- 20% of PMs being performed
- Non Y2K compliant CMMS

WHERE WE FOUND OURSELVES ON 8/29/99

- A PM process that was fragmented relative to the work control process
- A contract that did not address all equipment needing PM activity
- PMs worked to Maintenance Instructions vice Maintenance Task Sheets
- Work illogically grouped by system & geography

STRATEGIES

- Establish a dedicated PM team within FSD
- Establish rapport with customer through partnering
- Include crafts in process development

WHERE WE ARE TODAY

- Performance rating >97%
- Crafts participating in problem solving
- Contracts in place to support outsourcing
- Accurate equipment database
- Accurate job plan man hour estimates
- Levelized and logically grouped work

HOW DID WE GET HERE?

- Established MAXIMO “superuser” position within FSD
- Developed labor reports
- Daily meetings with PM Team Manager, CMMS Manager, Work Control Manager

HOW DID WE GET HERE?

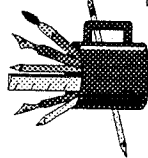
- Weekly status meeting with Project Manager, MIS, Business Mgr, Work Control Mgr, and MAXIMO Superuser
- Published weekly newsletter (MAX Facts) to educate the work force on the application of MAXIMO



MAX FACTS

MAXIMO Newsletter

September 1, 2000



RONNA'S NOTES

I want to take this opportunity to thank you all for your involvement in making MAXIMO a routine part of our maintenance operation. It hasn't been easy everyone's cooperation, we'll make steady improvements. This program can't be worked only by the 4 people in the FSD Maintenance Support Section. It's going to take active involvement from the shops, supervisors, systems engineers, work control, and management, in order to make it a success, and I believe we have that involvement. We have received numerous questions, concerns, and suggestions from you which have helped identify problems, and I'd like to see that continue.

This is our first issue of "MAX FACTS". We intend to use this as an informational as well as learning tool. If you have any idea on what you'd like to see in future editions, please get with Jody, Beth, or Bonnie.

Again, thank you for putting us on our way to a well managed maintenance program!

FROM THE PM COORDINATOR:



The PM Coordinator Team is finding errors on PM work orders that have more than one crew listed. Supervisors - Please check these. Coordinate your portion of the work order with the other crews for final completion. If the work order comes to the PM Coordinator completed by only one crew, the charge number is taken off the pick list and the next crew has nothing to charge to. It is a very difficult task to have the charge number reactivated. We are considering several options at this time to correct this. Some of the options are: Two crews - two work orders, linked work order numbers, and reminders in the job plan to coordinate all crews.

The PM program is going through a lot of changes. If you have any questions or comments, please drop me an email (jody.malley@ssc.nasa.gov) for publication in the next MAX FACTS.



QUESTION OF THE WEEK:

What's up with all those dates in MAXIMO?

ANSWER: PM work orders have three sets of date fields with start and finish dates: (1) TARGET, (2) ACTUAL, and (3) SCHEDULED DATES.

TARGET START DATE - When the work can begin. For PM Work orders, it is based on the last TARGET START date plus the interval (weekly, monthly, quarterly, etc.)

TARGET COMPLETION DATE - The end of the PM window in which we can accomplish the task on schedule per the contract. For weekly PM's, we have 4 days. Monthlies have 14 days and so on.

SCHEDULED DATES At the present time, these are blank on PM work orders. We hope to change that in the future and use it to record the time frame in which we actually have the work scheduled to be done.

ACTUAL FINISH When the work was done



OUTAGE/CONSTRUCTION NOTICES:

During September - B-8100 high bay will have new metal siding installed. Access to the north elevation of the building will be periodically blocked off.

Coming soon - The exterior of the new south wing of B-1100 will be painted soon. Watch for barricades.

New high voltage electric lines are being installed along Propellant Boulevard. Use caution driving there.

HOW DID WE GET HERE?

- Designed and implemented FSD Web page containing pertinent maintenance information

FSD HOME PAGE

[Preventive Maintenance Workorders](#)

[Corrective Maintenance Workorders](#)

[FSD Information Exchange](#)

[FSD Quality Connection](#)



Link to MSS Home Page

FSD HOME PAGE

Facilities Systems Department

Press here ----- Preventive Maintenance Workorder Reports ----- Press here

Press here ----- Corrective Maintenance Workorder Reports ----- Press here

Press here ----- FSD Info Exchange ----- Press here

Press here ----- FSD Quality Connection ----- Press here

Important users note: The "Scheduled/Incomplete" reports were modified to sort on Target Completion Date rather than Workorder Number. If you need to search for a Workorder number while viewing the report, simply hold down the "CTRL" key and press "F". The "Ctrl-F" keystroke activates the FIND function on your browser and you can search for any text string. This should work on any web page.

This page updated 3/7/01

Email to: redlaba@sc.nasa.gov if you have comments or need to add anything to this web page.



Document Done

Slide 1 of 5



Facilities Department

MAXIMO Reports - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape

Bookmarks Location

WebMail Radio People Yellow Pages Download Calendar Channels RealPlayer

file:///E:/Output/Manager Reports/FSD Managers' Web Page/SLD001_files/v3_document.htm

FSD HOME PAGE

Preventive Maintenance Workorders

Corrective Maintenance Workorders

FSD Information Exchange

FSD Quality Connection

MSS

Preventive Maintenance Workorders

Previous Month Reports <i>Automatically Updated Daily</i>	Current Month Reports <i>Automatically Updated Hourly</i>	Next Month Reports <i>Automatically Updated Daily</i>
Scheduled/Incomplete	Scheduled/Incomplete	Scheduled/Incomplete
Completed	Completed	Completed
Cancelled	Cancelled	Cancelled
Deferred	Deferred	Deferred
Monthly Summary	Monthly Summary	Monthly Summary

HOW DID WE GET HERE?

- Consistent match between equipment and job plan database
- Maintenance standards upgraded
- Diligent tracking of PM's worked/deferred/canceled, etc

Summary of PM Workorders Targeted for the period 2/1/01 through 2/28/01

Last Updated:
3/16/01 7:21:07AM

(Where SWR# begins with 85F, 86A, 86FC, P3H, PTME, PTMF, and PTTP)

655 Completed Workorders

95.4 %	or	625	Workorders Completed On Time
4.6 %	or	30	Workorders Completed Late
Lead Crew	6220		FIRE & EMERG, MEDICAL 35
Lead Crew	6411		MAINTENANCE ENGINEER 153
Lead Crew	6442		ELECTRICAL SHOP 5
Lead Crew	6443		MECHANICAL/PLUMBING 17
Lead Crew	6444		EQUIPMENT SYSTEMS SH 205
Lead Crew	6451		EQUIPMENT MAINTENAN 61
Lead Crew	6452		MAINTENANCE OPERATIONS 6
Lead Crew	6454		HVAC 5
Lead Crew	6462		TRANE SUBCONTRACTS 137
Lead Crew	6910		1
			on time 0 late
			on time 0 late
			on time 0 late
			on time 0 late
			on time 0 late
			on time 1 late
			on time 1 late
			on time 0 late
			on time 28 late
			on time 0 late

Scheduled/Incomplete Workorders

Lead Crew

Workorders

2 Deferred Workorders

Lead Crew	6451	EQUIPMENT MAINTENANCE	1	Deferrals
Lead Crew	6910	TRANE SUBCONTRACTS	1	Deferrals

15 Cancelled Workorders

Lead Crew	6411	MAINTENANCE ENGINEER	2	Cancelled
Lead Crew	6442	ELECTRICAL SHOP	1	Cancelled
Lead Crew	6444	EQUIPMENT SYSTEMS SH	1	Cancelled
Lead Crew	6454	MAINTENANCE OPERATIONS	4	Cancelled
Lead Crew	6462	HVAC	7	Cancelled

672 Workorders Total

OPTIONS CONSIDERED

- Outsourcing:
 - Better Quality
 - Higher Cost
 - Less Flexibility
- Temporary labor for peaks:
 - Smaller recruiting base resulting in permanent employees with less skills

WHAT TO DO NEXT

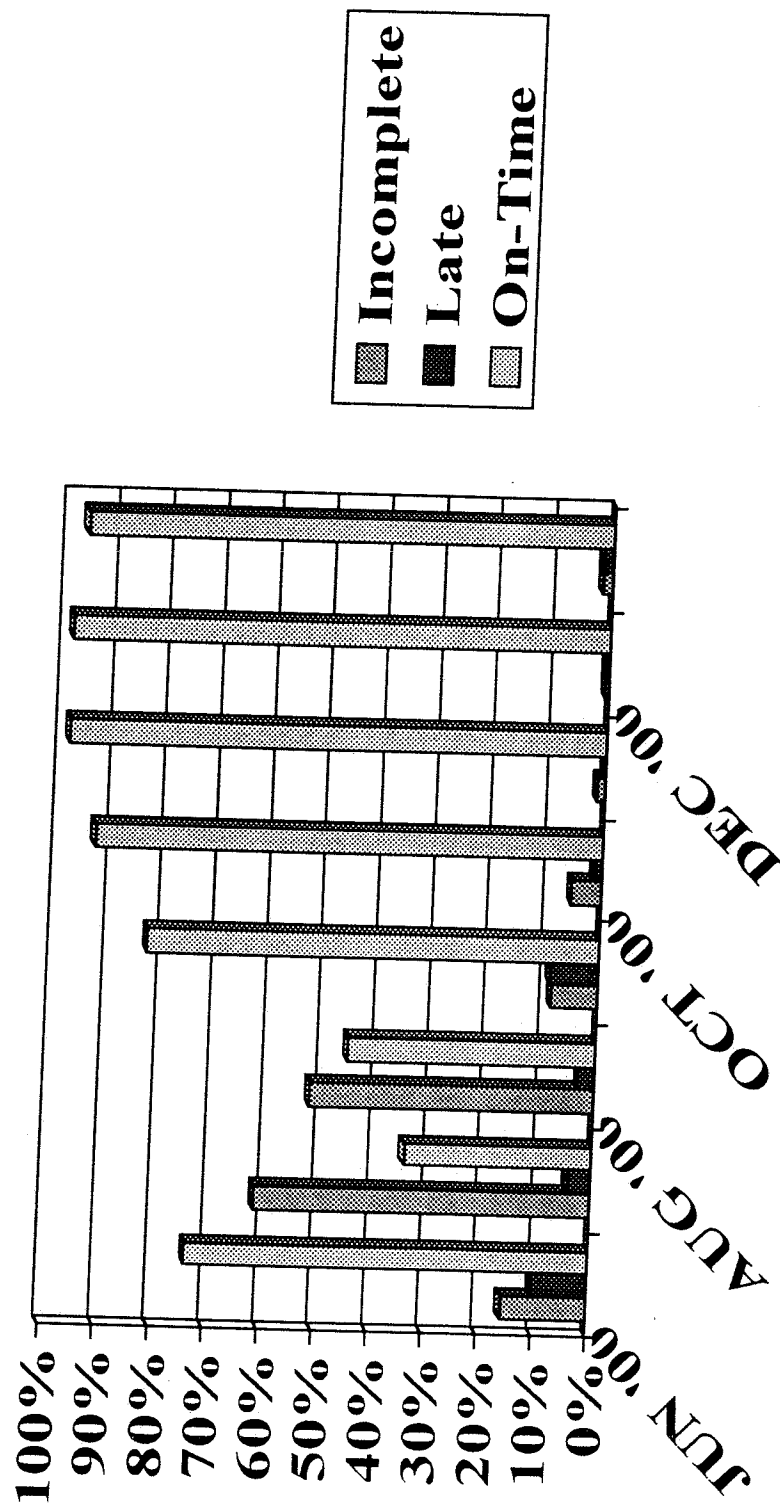
- Improve support infrastructure
 - Work Control
 - MIS
 - Logistics
 - Contracts
 - Database Configuration Control

WHAT TO DO NEXT

- Continue selling MSS methods to customer and crafts
- Establish meaningful performance criteria

FSD Performance History

PM Workorders



REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188	
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